

### Remarks

In response to the Office Action dated December 23, 2008, Applicant respectfully requests reconsideration based on the previous amendments and following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance. Claim 21 has been previously withdrawn in response to a previous restriction requirement. Claims 1, 7, 8, 10-11 and 24-31 have been amended. Claims 32-33 are new. Claims 10 and 30 have been cancelled without prejudice or disclaimer. The additional subject matter added to the claims is supported by the specification and hence no new matter has been added.

### Interview Summary

A telephone interview was conducted on February 23, 2009 between the undersigned and Examiner Graham. During the interview the 112 rejections were discussed in regards to claim 24 reciting computer readable medium and claim 1 reciting advertisements pre-identified to appeal to a preference of one or more viewers. It was further discussed that the references failed to describe a bit masking technique for finding the closest match to the advertisement classification. No agreement was reached.

### 112 Rejections

Claims 1, 7 and 24-31 stand rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Claims 24-31 stand rejected for reciting, “a computer readable medium containing instructions for performing acts when executed on a computing device, comprising ...” The Office Action contends that support for this subject matter is not provided in the specification. The specification describes the use of a set top box (STB) to implement the method described for inserting targeted advertisements into a media delivery stream. FIG. 1 shows a Main Storage 18b of the STB as a particular embodiment of computer readable medium and Replay Processor 13c as a particular embodiment of a computing device capable of carrying out instructions. The descriptions of these particular components of computer hardware in the specification provide support for claim 24 directed to computer readable medium containing instructions executed on a computing device. Therefore, Applicant requests that the 112 rejection against claims 24-31 on the above noted grounds be withdrawn.

The Office Action further rejects claim 1 and claim 24 by asserting that the recitation of, “receiving at a media delivery device a plurality of advertisements pre-identified by a transmitting entity to appeal to a preference of one or more viewers,” is not supported by the specification. In particular, the Office Action asserts that the “pre-identified” term is not supported. To support its assertion, the Office Action notes that the specification describes that the set top box locates an appropriate advertisement from storage and thus the advertisement “is not identified before [the] STB receives it.” However, the claim recites, “a plurality of advertisements pre-identified by a transmitting entity to appeal to a preference of one or more viewers.” Thus, the claim is reciting that the advertisements are pre-identified to appeal to a preference of one or more viewers. The claim is not reciting that a particular advertisement is pre-identified to be inserted into the media delivery stream. Furthermore, the specification describes that the commercials are associated to a content type field which includes types of viewers that the commercial would appeal to (see page 11, line 20 – page 12, line 10). Thus, the 112 rejection based on the pre-identified term is supported by the specification and Applicant respectfully requests its withdrawal.

The Office Action further rejects claims 1 and 24 under 112 by asserting that there is no support in the specification for claims 1 and 24 reciting, “each of the sets of characteristics being unassociated with the one of viewers.” However, the specification describes that the set top box stores a commercial information table which includes fields associated to each commercial such as a sponsor name, pricing, and content type (see page 11, lines 1-10). Each one of these fields describes a characteristic of a commercial that is not associated with a viewer.

The Office Action also asserts that there is no support in the specification for, “creating a record associated with each of the plurality of advertisements, the record including a classification for each data element of the set of characteristics.” This particular clause has been deleted from the claim and the 112 rejection in regards to the particular clause is now moot. However, Applicant notes that the specification supports that there are characteristics associated with each commercial and stored on the STB. For example, the specification describes a commercial information table stored in the set top box with information associated to each commercial (see page 11, lines 1-10). Figure 4 further describes a “Type of Commercial” and “Sponsor” fields that provide particular characteristics of the commercials.

The Office Action further asserts that there is no support “for assigning a weighting to at least two data elements in each record of the plurality of advertisements.” This particular clause has been deleted from the claim. However, Applicant notes that the claims now recite “applying a weighting to at least one characteristic.” The specification supports this limitation by describing on page 17, lines 8-11,

the CPU can include a weighting feature for determining priority based upon a number of factors, including the frequency by which a commercial has been inserted, the price paid by an advertiser, the expiration date of the advertising contract, and the correlation between the product advertised in the commercial and the subject matter of the television program.

The Office Action additionally asserts that there is no support for “comparing each of the at least two characteristics element weightings in the record.” In particular, the Office Action asserts that the specification describes an indirect comparison of commercials. The phrase “directly together” has been deleted from the claim and hence the rejection in regards to this particular language is moot.

The Office Action also rejects claims 7 and 27 under 112 by asserting that there is no support in the specification for the claim reciting that the classifications include the time of day of the week of the television program and the type of the television program. Applicant notes that the claims have been amended to recite characteristics rather than classifications. Furthermore, the specification describes that one of the factors (i.e. characteristics) that can be included in the algorithm by which the commercial information database is searched to identify an appropriate commercial is “the hour of the day and the day of the week of the program.” The specification further describes another factor that may be considered is, “the type of television program being viewed.” (see page 13, lines 11-15) Thus, the specification explicitly describes these as particular characteristics of the advertisements. Applicant respectfully requests that the 112 rejections against the claims be withdrawn since the features recited by the claims are supported by the specification.

### 103 Rejections

Claims 1-3 and 7-11 stand rejected under 35 USC §103(a) as being unpatentable over Zigmond (US Pat. 6,698,020) in view of Knee (US Pat. App. 20020095676) in view of Ficco (U.S. Pat. App. 2005/0166224) and further in view of the inherency of the mathematical theory

of transitivity within Knee. Applicant respectfully traverses the rejections to the extent that they apply to the currently pending claims.

Claims 1-3, 7-11 and 32

Applicant respectfully submits that the combination of Zimond, Knee and Ficco fail to describe or suggest each and every feature recited by claim 1. For example, claim 1 recites, “selecting the stored advertisement to be inserted by applying a weighting to at least one characteristic of each advertisement ... wherein the at least one weighted characteristic includes the past usage of the advertisement by the display device.”

The Office Action concedes that Zigmond fails to describe the use of weighting in selecting between multiple advertisements. The Office Actions proceeds to assert that Knee describes, “assigning a weighting to at least two elements in each record of the plurality of advertisements.” Knee describes the use of weighted factors applied to user inputs received by the set top box to determine a value for each demographic category for the user of the set top box. For example, if the set top box (STB) receives an input from a user of the set top box to record a sports program, the STB assigns a weight value of 1.0 indicating that the user of the STB has a strong affiliation to the sports fan demographic. The demographic category value determined for the user (the user value) is compared to a preselected value of a demographic category for an advertisement in determining whether to display the advertisement to the user of the STB. Knee describes a “best fit” approach to select one of many advertisements to be displayed at the STB by calculating the absolute difference between the preselected value and the user value for each demographic category.

The use of weighting described by Knee concerns user inputs received by the STB to determine a value for a demographic category for a user. Knee fails to describe the use of weighting to select from a plurality of advertisements for display where the weighted characteristics includes the past usage of each of the advertisements. This is contrast to claim 1 which recites, “applying a weighting to at least one characteristic of each advertisement ... wherein the at least one characteristic includes the past usage of the advertisement by the display device.” The Office Action also contends that Keen makes use of the well-known mathematical principles of transitivity. However, the mathematical principles of transitivity fail to account for applying a weighting to the past usage of an advertisement stored on the display device as recited

by claim 1 while Keen is silent on applying a weight to any characteristic of advertisements concerning past usage.

As noted above, the Office Action concedes that Zigmond fails to describe the use of weighting to select from a plurality of advertisements for insertion by a display device. Ficco is cited by the Office Action to show on-the-fly adaptation of advertisements in comparing sets together. Ficco describes the selection of an advertisement segment by an advertisement selection factor but fails to account for the noted deficiency. Thus, the combination of Zigmond, Knee and Ficco fails to describe each and every feature recited by claim 1 such that claim 1 is allowable over the combination. Claims 2-3, 7-11 and 32 depend from claim 1 are allowable for at least the same reasons.

Claim 32 recites an additional feature not described by the combination of Zigmond, Knee and Ficco. For example, claim 32 recites, “applying a bit mask to the content type field wherein the most general category types are masked with high order bits and the most specific category types are masked with low order bits.” Zigmond describes the selection of an advertisement but fails to describe the selection of an advertisement by the application of a bit mask to a content type field. Furthermore, Zigmond fails to account for the use of a bit mask to select an advertisement where most general category types are masked with high order bits and the most specific category types are masked with low order bits as recited by claim 1. Neither Keen nor Ficco accounts for the noted deficiency. Thus, the combination of Zigmond, Knee and Ficco fails to account for this additional feature recited by claim 32 such that claim 32 is allowable over the aforementioned combination for this additional reason.

#### Claims 24-31 and 33

Applicant respectfully submits that the combination of Zimond, Knee and Ficco fail to describe or suggest each and every feature recited by claim 24. For example, claim 24 recites, “selecting the stored advertisement to be inserted by applying a weighting to at least one characteristic of each of the stored advertisements ... wherein the at least one weighted characteristic is unassociated with the one or more viewers.”

The Office Action concedes that Zigmond fails to describe the use of weighting in selecting between multiple advertisements. The Office Actions proceeds to assert that Knee describes, “assigning a weighting to at least two elements in each record of the plurality of

advertisements.” Knee describes the use of weighted factors (weight values) applied to user inputs received by the set top box to determine a value for each demographic category for the user of the set top box. For example, if the STB receives an input from a user of the set top box to record a sports program the STB assigns a weight value of 1.0 indicating that the user of the STB has a strong affiliation to the sports fan demographic. The demographic category value determined for the user is compared to a preselected value of a demographic category for an advertisement in determining whether to display the advertisement to the user of the STB.

The use of weighting described by Knee concerns assigning demographic values to user inputs received by the STB and thus the weighted characteristics are associated with the one or more viewers of the STB. This is in direct contrast to claim 24 which recites, “applying a weighting to at least one characteristic of each of the stored advertisements ... wherein the at least one characteristic is unassociated with the one or more viewers.” The Office Action also contends that Keen makes use of the well-known mathematical principles of transitivity. However, the mathematical principles of transitivity fail to account for the applying of weighting to characteristics unassociated with viewers of a display device as recited by claim 24 when Keen describes applying weighting to only characteristics of viewers of the STB.

As noted above, the Office Action concedes that Zigmond fails to describe the use of weighting to select from a plurality of advertisements for insertion by a display device. Ficco is cited by the Office Action to show on-the-fly adaptation of advertisements in comparing sets together. Ficco describes the selection of an advertisement segment by an advertisement selection factor but fails to account for the noted deficiency. Thus, the combination of Zigmond, Knee and Ficco fails to describe each and every feature recited by claim 24 such that claim 24 is allowable over the combination. Claims 25-31 and 44 depend from claim 24 are allowable for at least the same reasons.

Claim 33 recites an additional feature not described by the combination of Zigmond, Knee and Ficco. For example, claim 32 recites, “applying a bit mask to the content type field wherein the most general category types are masked with high order bits and the most specific category types are masked with low order bits.” Zigmond describes the selection of an advertisement but fails to describe the selection of an advertisement by the application of a bit mask to a content type field. Furthermore, Zigmond fails to account for the use of a bit mask to select an advertisement where most general category types are masked with high order bit and

the most specific category types are masked with low order bits as recited by claim 1. Neither Keen nor Ficco accounts for the noted deficiency. Thus, the combination of Zigmond, Knee and Ficco fails to account for this additional feature recited by claim 33 such that claim 33 is allowable over the aforementioned combination for this additional reason.

Conclusion

Applicant asserts that the application including claims 1-3, 7-9, 24-29 and 32-33 are in condition for allowance. Applicant requests that a Notice of Allowability be provided. Should the Examiner have any questions or comments, the Examiner is invited to call the undersigned at the number listed below.

No fees are believed due. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025

Respectfully submitted,

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